



Flight Opportunities

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Enjoy!

The Flight Opportunities team

Recently Announced

NASA TechLeap Prize



NASA
TechLeap
PRIZE

Q&A Session: June 30, 10-11 a.m. PDT

Join this virtual session to learn more about the new **TechLeap Prize** and the topic of the current challenge: **Autonomous Observation Challenge No. 1**

Other Key Dates:

Registration due: July 28, 2021

Submissions due: August 11, 2021

Visit the **TechLeap website** for full details.

NASA TechRise Student Challenge

Educator Workshops: July 28, 12-4 p.m. EDT; August 11, 12-4 p.m. EDT

Entries Open: August 18, 2021

Entries Close: November 3, 2021

Visit the **TechRise website** to register for workshops and read the full challenge details.

Closing Soon

NASA Issues Request for Proposals (RFP) for Microgravity Flight Services

NASA has issued an RFP to solicit and award one or more contracts for Microgravity Flight Services with an anticipated period of five years. Contracted companies will provide space on commercial parabolic flights, including payload integration services, to fly technology payloads and human operators in reduced gravity in order to test the innovations and advance their technology readiness levels. The flights and other services solicited are for NASA internal use and other government agencies only.

This RFP is for U.S.-based organizations; proposals from non-domestic companies will not be accepted. **Read the full RFP.**

Responses Due: July 23, 2021 by 2 p.m. PDT



The HiDRON stratospheric glider from Stratodynamics is seen over New Mexico on June 6, 2021 carrying turbulence detection technologies supported by NASA's Flight Opportunities program. Credits: Stratodynamics, Inc./UAVOS

Stratodynamics Completes First Flight for Program-Supported Innovations

In a series of flights between June 1 and 6 Stratodynamics, Inc. of Lewes, Delaware, launched its HiDRON stratospheric glider from a high-altitude balloon at Spaceport America in New Mexico carrying technology supported by Flight Opportunities for the first time. Flying aboard were **technologies** developed by the University of Kentucky in Lexington and NASA's Langley Research Center in Hampton, Virginia that aim to help researchers improve turbulence detection capabilities.

Learn more about the technologies, flight, and the HiDRON glider in the full [NASA web feature](#).

NASA Cloud Sensor Technology Tested on Raven Aerostar Balloon System

How do clouds contribute to climate patterns on Earth, as well as other planets like Saturn, Venus, and Mars? This question motivated NASA's development of a new nephelometer called NephEx that measures details about the interior compositions of clouds. The technology was tested on June 11 aboard a high-altitude balloon provided by Raven Aerostar of Sioux Falls with funding from Flight Opportunities. The balloon carried the sensor to a float altitude of about 70,000 feet for approximately two hours and into cloud formations to gather data about their interior compositions – information critical to understanding the impact of clouds on a planet's climate.

Learn more about NephEx and its recent flight test by reading the full [NASA web feature](#).

“These Flight Opportunities-supported launches are affordable and accessible and allow us to take important, iterative steps in the technology's development in an environment directly applicable to the way the technology would ultimately be deployed. They give us a lot of practice and learning quickly to ultimately arrive at a better final product.”

—Dr. Anthony Colaprete, NephEx Principal Investigator, NASA's Ames Research Center

Lessons From the Launchpad

Give Yourself Sufficient Payload Development Time

Whether you've designed one payload or 100, developing a realistic timeline to implement the design, review it with colleagues, and pre-test it can be challenging. Communication is key to making sure you build an appropriate schedule.

- Initiate a scheduling conversation with your flight provider early on and set a realistic payload readiness date.
- Establish regular communication with your flight provider and Flight Opportunities campaign manager to address any technical issues that may impact scheduling.
- If you run into issues and will not have your payload ready by the original date, reach out to your flight provider and campaign manager as soon as it becomes clear that you need more time.

In the coming months, we'll have more tips covering specific aspects of payload design. Stay tuned!

Join us in August for the Next Community of Practice Webinar

Please note that there will be no Community of Practice webinar in July. We look forward to reconvening our regular webinar series in August. Stay tuned for the details!

Events

Mark Your Calendars

ISS R&D Conference 2021: August 3-5, Virtual

SmallSat Conference 2021: August 7-12, Virtual

Join Flight Opportunities Chief Technologist Stephan Ord and Alexander Van Dijk for recorded talks at this event.

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Have ideas or feedback for the Flight Opportunities newsletter?

Drop us a line at:

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STAY CONNECTED:



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Flight Opportunities is part of NASA's Space Technology Mission Directorate.